Faecal Sludge Management (FSM)

A factsheet about stakeholders, implementation, FSM planning, policy reforms and financial models.

Stakeholders in FSM

The following stakeholders play an important role in FSM:

- Households & the community
- Decentralized government services (health department, agricultural department, Environmental department, Urban planning and infrastructure, Housing department)
- Community-based organisations/non-governmental organisations
- Public authorities (e.g. local, city, national)
- Public utilities (Pit emptying services, Operation of public toilets, Operation of FSTPs)
- Private sector (Pit emptying services (small-scale enterprises or individual manual desludgers), Operation of faecal sludge treatment plants, Operation of public toilets)
- Farmers, farmers’ associations and cooperatives
- Donors

How is FSM implemented?

The municipality, existing desludging service providers and other stakeholders are brought together to craft regulations, create sustainable operating models and participate in training, thus enabling the service providers to work under a legal framework. A treatment plant is then implemented as a designated disposal point for the desludging operators where faecal sludge is treated and disposed of safely.

FSM planning

1. Set objectives for your FSM Plan – have a vision, Objectives for your FSM Plan: specific, measurable, attainable, relevant, time based
2. Set the boundary conditions
   - Financial – within the budget available
   - Geography – within the city boundary
   - Timeline – within a fixed period of time
3. Team formation:
   - Political Body (To ensure that any governance or institutional related recommendation/FSM solution is passed in the municipality and effectively carried out on ground)
   - Consultants (They are the experts in the sector who would be supporting/advising the ULB throughout the process of FSM implementation)

---

• Executive Body (This group would consists of engineers and surveyors who would be active on ground: Carry out the baseline surveys to assess the existing sanitation scenario & Carry out the implementation related activities – building of FSTP)

4. Identification of stakeholders (classification):
   • High influence-Low interest group
   • High influence-High interest group
   • Low influence-Low interest group
   • Low influence-High interest group

5. Stakeholder Involvement Approach


7. Consultation workshop with ULBs and Executive Body, Various qualitative and quantitative tools to represent the existing sanitation scenario – SFD, Identification of gaps within existing practices – with respect to OBJECTIVES (Vision)

8. Technical objectives:
   • Socially acceptable technology
   • Easy to integrate with existing infrastructure
   • User Interface: building of toilets
   • Containment: installation of septic tanks and pits
   • Collection and conveyance: procurement of desludging vehicles/operations and maintenance
   • Treatment: construction of treatment units/operations and maintenance
   • Reuse/Disposal: setting up reuse infrastructure (biogas stoves, co-composting plant)

Policy reforms on FSM in India

There are no specific legal provisions relating to sanitation or Septage management, but there are provisions relating to sanitation services and environmental regulations.

Provisions relating to sanitation services and environmental regulations, majorly stems from:
• The Environment (Protection) Act, 1986
• The Water (Prevention and Control of Pollution) Acts
• Legislations for prohibition of employment as Manual Scavengers and their Rehabilitation
• Municipal Acts and Regulations

National policy level interventions on sanitation includes;
• National Urban Sanitation Policy 2008
• Draft National Water Policy 2012
While talking about financials concerning FSM, there are different fields that need to be taken into account:

- Costs of Building and Operating FSM Systems (User fees for desludging and transport, Trucks, Customer Service, Treatment of FS, property/water tax etc.)
• Contract Structures for FSM

Focusing on the contract structures there are three different ways of financing proper FSM:

• Government invests and maintain FSM / FSTP all investments, risks and obligations shall be administered by the government (Construct & Manage)
• Government invests & private contractor maintains FSM/FSTP (Service Contracts)
• Government and private party invest & Private partner remain = Public-Private-Partnership (PPP) (Private party can bring expertise and share investment burden) PPP: A long-term contract between a private party and a government entity for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance

<table>
<thead>
<tr>
<th></th>
<th>Construct &amp; Manage</th>
<th>Service Contracts</th>
<th>PPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Govt Builds, Govt Operates</td>
<td>Govt builds, Private Operates</td>
<td>Govt and Private Build and Operate</td>
</tr>
<tr>
<td>CapEx by Govt</td>
<td>100%</td>
<td>100%</td>
<td>30-50% + land</td>
</tr>
<tr>
<td>CapEx by Pvt.</td>
<td>--</td>
<td>--</td>
<td>50-70%</td>
</tr>
<tr>
<td>OpEx by Govt.</td>
<td>100%</td>
<td>70-100%</td>
<td>50-80%</td>
</tr>
<tr>
<td>Contract Period</td>
<td>--</td>
<td>3-5 yrs</td>
<td>12-20 yrs</td>
</tr>
</tbody>
</table>

Fig. 3 Options for Government

Fig. 4 Public-Private-Partnership